

**REMARKS**

Claims 1-55 and 57 are currently pending in the application. Claim 56 has been canceled. Claims 3-11, 17, 18, 25, 26, 30, and 46 have been withdrawn. Claims 1, 2, 12-16, 19-24, 27-29, 31-45, 47-55, and 57 have been rejected. Applicant has amended claims 27, 48 and 49. Applicant requests reconsideration of the application in light of the following remarks.

**Rejections under 35 U.S.C. §112**

Claim 2 stands rejected by the Examiner under 35 U.S.C. §112, first paragraph. A claim not reading on an elected species has absolutely nothing to do with section 112, first paragraph. Reconsideration is respectfully requested.

The first and second array having components being attached to each other and an intermediate array lying between the first and second arrays is shown in other Figures. Figure 10A shows beams useable with each of the embodiments of the column. Applicant respectfully requests that the rejection of claim 2 under 35 U.S.C. § 112, first paragraph be withdrawn.

Claims 27 and 48-49 stand rejected by the Examiner under 35 U.S.C. §112, second paragraph. Reconsideration is respectfully requested. In accordance with this rejection, claims 27, 48 and 49 have been amended to comply with the Examiner's suggestions and are now believed to conform with Section 112, second paragraph. Applicant respectfully requests that the rejection of claims 27 and 48-49 under 35 U.S.C. § 112, second paragraph be withdrawn.

### **Rejections under 35 U.S.C. §103**

To establish a *prima facie* case of obviousness under 35 U.S.C. §103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited prior art reference must teach or suggest all of the claim limitations. Furthermore, the suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based upon the Applicants' disclosure. A failure to meet any one of these criteria is a failure to establish a *prima facie* case of obviousness. MPEP §2143.

### **Claims**

Claims 1-2, 12-13, 43-44 and 50 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter "Meusienne") in view of Overbo (U.S. Patent No. 4,566,247, hereinafter "Overbo"). Applicant respectfully traverses this rejection and requests reconsideration of the claims. Furthermore, all the rejections involving Meusienne in view of Overbo are respectfully traversed.

Figures 7a and 7b of Meusienne show a frame structure made up of four angle members of equal length about a common edge line 215, the angle members being staggered in a similar manner to Figures 6a or 6b so as to be able to interlock with an identically constituted assembly.

Overbo discloses a captive column structure. The captive column structure may be formed by pultrusion (column 2, line 52). The column elements cannot buckle or move relative to one another (column 3, lines 7-9).

In this rejection, as well as the remaining rejections under 35 U.S.C. §103, Meusienne appears to be relied on for the teaching that a plurality of angle members can be aligned in a first horizontal array about a vertically oriented central axis. However, as the Examiner admits, Meusienne does not show a plurality of angle members wherein each angle member has the first flat side oriented at an obtuse angle from the second flat side, as recited in each of Applicant's independent claim.

Independent claim 1, independent claim 44, and independent claim 50 all recite both a vertically oriented common central axis and a plurality of column panels comprising a first flat side and a second flat side being arranged at an obtuse angle relative to each other.

Clearly, Figure 7b of Meusienne shows angle members with right angles, not obtuse. Overbo fails to overcome the deficiencies of the primary reference, Meusienne. It would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine Meusienne and Overbo, in the manner suggested by the Examiner. Nor, do any of the many references relied on in this 26 page Office Action provide any evidence to suggest the proposed combination.

It would not have been obvious to one of ordinary skill in the art, or to anyone for that matter, to make obtuse angles if you have four flanges at right angles relative to each other, i.e. a cross, as taught by Meusienne. Furthermore, the Examiner relies on both Figures 7b (four angle members) and 5a of Meusienne to teach Applicant's claimed invention. One of ordinary skill in the art could not have combined Meusienne and Overbo, as Overbo would destroy the Meusienne reference.

Claims 1, 44 and 50 are not obvious in light of Meusienne in view of Overbo.  
Claims 2, 12-13, and 43 are dependent from independent claim 1 and therefore also not obvious in light of Meusienne in view of Overbo.

Claims 14, 16, 19, 27-28, 33-38, 47, 49, and 51-55 were rejected 35 U.S.C. §103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) as applied to claim 1 above and further in view of Fairchild (U.S. Patent No. 3,327,870, hereinafter “Fairchild”). Applicant respectfully traverses this rejection and requests reconsideration of the claims. It is noted that independent claim 51 was not rejected above over Meusienne in view of Overbo.

Fairchild fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo. Fairchild does not show a plurality of angle members wherein each angle member has the first flat side oriented at an obtuse angle from the second flat side, as recited in each of Applicant’s independent claims 1, 44, 50 and 51.

Claims 14, 16, 19, 27-28, and 33-38 are dependent from independent claim 1; claims 47 and 49 are dependent from independent claim 44; and claims 52-55 are dependent from independent claim 51. Thus, claims 14, 16, 19, 27-28, 33-38, 44, and 52-55 are not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild.

Claim 45 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) as applied to claim 44 above and further in view of Bright (U.S. Patent No. 6,223,494, hereinafter “Bright”) and Dunne (U.S. Patent No. 3,564,783, hereinafter “Dunne”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Both Bright and Dunne fail to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo. There is no disclosure in either Bright or Dunne showing a plurality of angle members wherein each angle member has the first flat side oriented at an obtuse angle from the second flat side, as recited in independent claims 44. Claim 45 is dependent on independent claim 44 and is therefore not obvious in light of Meusienne in view of Overbo, and further in view of Bright and Dunne.

Claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) as applied to claim 1 above and further in view of Sams (U.S. Patent No. 4,218,859, hereinafter “Sams”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Sams fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo. The column panels in Sams do not even appear to be aligned along a vertically oriented common central axis, while they are in Meusienne. Claim 15 is dependent from independent claim 1. Therefore, claim 15 is not obvious in light of Meusienne in view of Overbo, and further in view of Sams.

Claim 20 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) and Fairchild (U.S. Patent No. 3,327,870, hereinafter “Fairchild”) as applied to claim 19 above and further in view of Smith (U.S. Patent No. 1,250,685, hereinafter “Smith”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Reference to “Overto” appears with the rejection of claim 20. Applicant is uncertain whether the Examiner is referring to Overbo (U.S. Patent No. 4,566,247) or a new reference. Correction and/or clarification is requested.

Smith fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Fairchild. Claim 20 is dependent from independent claim 1. Therefore, claim 20 is also not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild, and still further in view of Smith.

Claim 21 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) and Fairchild (U.S. Patent No. 3,327,870, hereinafter “Fairchild”) as applied to claim 19 above and further in view of Stafford (U.S. Patent No. 1,261,454, hereinafter “Stafford”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Reference to “Overto” also appears with the rejection of claim 21. Applicant is uncertain whether the Examiner is referring to Overbo (U.S. Patent No. 4,566,247) or a new reference. Correction and/or clarification is requested.

Stafford fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo and further in view of Fairchild. Claim 21 is dependent from independent claim 1. Therefore, claim 21 is also not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild, and still further in view of Stafford.

Claim 22 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) and Fairchild (U.S. Patent No. 3,327,870,

hereinafter “Fairchild”) as applied to claim 19 above and further in view of Kreizinger (U.S. Patent No. 5,369,930, hereinafter “Kreizinger”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Kreizinger fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Fairchild. Claim 22 is dependent from independent claim 1. Therefore, claim 22 is also not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild, and still further in view of Kreizinger.

Claim 23 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) and Fairchild (U.S. Patent No. 3,327,870, hereinafter “Fairchild”) as applied to claim 19 above and further in view of Anderson et al. (U.S. Patent No. 5,539,163, hereinafter “Anderson”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Anderson fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Fairchild. Claim 23 is dependent from independent claim 1. Therefore, claim 23 is also not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild, and still further in view of Anderson.

Claim 24 was rejected under 35 U.S.C. §103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) and Fairchild (U.S. Patent No. 3,327,870, hereinafter “Fairchild”) as applied to claim 19 above and further in view of Robinson et al. (U.S. Patent No. 638,280, hereinafter “Robinson”). Applicant respectfully traverses this rejection and requests reconsideration of the claims. It is noted that the Examiner refers to

Robinson et al. 838,280. It is believed that the correct patent number is 638,280. Correction and/or clarification is requested.

Robinson fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Fairchild. Claim 24 is dependent from independent claim 1. Therefore, claim 24 is also not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild, and still further in view of Robinson.

Claim 48 was rejected under 35 U.S.C. §103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) and Fairchild (U.S. Patent No. 3,327,870, hereinafter “Fairchild”) as applied to claim 47 above and further in view of Vachon. (U.S. Patent No. 3,727,355, hereinafter “Vachon”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Vachon fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Fairchild. Claim 48 is dependent from independent claim 44. Therefore, claim 48 is also not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild, and still further in view of Vachon.

Claim 29, 31, 32, 41, 45, 47-49, 51-55, and 57 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”) and Fairchild (U.S. Patent No. 3,327,870, hereinafter “Fairchild”) as applied to claim 14 above and further in view of Sams (U.S. Patent No. 4,218,859, hereinafter “Sams”). Applicant respectfully traverses this rejection and requests reconsideration of the claims. It is noted that independent claim 57 was not rejected above over Meusienne in view of Overbo and further in view of Fairchild.



Sams fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Fairchild. Sams does not show a plurality of angle members wherein each angle member has the first flat side oriented at an obtuse angle from the second flat side, as recited in each of Applicant's independent claims 1, 44, 50, 51 and 57.

Claims 29, 31, 32, and 41 are dependent from independent claim 1; claims 45 and 47-49 are dependent from independent claim 44; and claims 52-55 are dependent from independent claim 51. Thus, claims 29, 31, 32, 41, 45, 47-49, and 52-55 are not obvious in light of Meusienne in view of Overbo, and further in view of Fairchild, and still further in view of Sams.

Claims 37-39 were rejected under 35 U.S.C. §103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter "Meusienne") in view of Overbo (U.S. Patent No. 4,566,247, hereinafter "Overbo") as applied to claim 1 above and further in view of Robinson et al. (U.S. Patent No. 638,280, hereinafter "Robinson"). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Robinson fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo. Claims 37-39 are dependent from independent claim 1. Therefore, claims 37-39 are also not obvious in light of Meusienne in view of Overbo, and further in view of Robinson.

Claim 40 was rejected under 35 U.S.C. §103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter "Meusienne"), in view of Overbo (U.S. Patent No. 4,566,247, hereinafter "Overbo") and further in view of Robinson et al. (U.S. Patent No. 638,280, hereinafter "Robinson") as applied to claim 37 above, and further in

view of Keil (U.S. Patent No. 6,279,288, hereinafter "Keil"). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Keil fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Robinson. Claim 40 is dependent from independent claim 1. Therefore, claim 40 is also not obvious in light of Meusienne in view of Overbo, and further in view of Robinson, and still further in view Keil.

Claim 41 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter "Meusienne") in view of Overbo (U.S. Patent No. 4,566,247, hereinafter "Overbo") and further in view of Robinson et al. (U.S. Patent No. 638,280, hereinafter "Robinson") as applied to claim 37 above, and further in view of Keil (U.S. Patent No. 6,279,288, hereinafter "Keil") and D'Amato (U.S. Patent No. 4,469,956, hereinafter "D'Amato"). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

D'Amato fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo, and further in view of Robinson, and still further in view of Keil. Claim 41 is dependent from independent claim 1. Therefore, claim 41 is also not obvious in light of Meusienne in view of Overbo, and further in view of Robinson, and still further in view Keil, and still even further in view of D'Amato.

Claim 42 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter "Meusienne") in view of Overbo (U.S. Patent No. 4,566,247, hereinafter "Overbo") as applied to claim 1 above and further in view of Robinson et al. (U.S. Patent No. 638,280, hereinafter "Robinson"). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Robinson fails to overcome the deficiencies of the primary reference combination, Meusienne in view of Overbo. Claim 42 is dependent from independent claim 1. Therefore, claim 42 is also not obvious in light of Meusienne in view of Overbo, and further in view of Robinson.

Claim 57 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Societe Meusienne (Patent No. GB1033890, hereinafter “Meusienne”) in view of Overbo (U.S. Patent No. 4,566,247, hereinafter “Overbo”); Bright (U.S. Patent No. 6,223,494, hereinafter “Bright”); and Dunne (U.S. Patent No. 3,564,783, hereinafter “Dunne”). Applicant respectfully traverses this rejection and requests reconsideration of the claims.

Figures 7a and 7b of Meusienne show a frame structure made up of four angle members of equal length about a common edge line 215, the angle members being staggered in a similar manner to Figures 6a or 6b so as to be able to interlock with an identically constituted assembly.

Overbo discloses a captive column structure. The captive column structure may be formed by pultrusion (column 2, line 52). The column elements cannot buckle or move relative to one another (column 3, lines 7-9).

In this rejection Meusienne appears to be relied on for the teaching that a plurality of angle members can be aligned in a first horizontal array about a vertically oriented central axis. However, as the Examiner admits, Meusienne does not show a plurality of angle members wherein each angle member has the first flat side oriented at an obtuse angle from the second flat side, as recited in independent claim 57.

Independent claim 57 recites both a vertically oriented common central axis and a plurality of column panels comprising a first flat side and a second flat side being arranged at an obtuse angle relative to each other.

Clearly, Figure 7b of Meusienne shows angle members with right angles, not obtuse. Overbo fails to overcome the deficiencies of the primary reference, Meusienne. It would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine Meusienne and Overbo, in the manner suggested by the Examiner. Nor, do any of the many references relied on in this 26 page Office Action provide any evidence to suggest the proposed combination.

It would not have been obvious to one of ordinary skill in the art, or to anyone for that matter, to make obtuse angles if you have four flanges at right angles relative to each other, i.e. a cross, as taught by Meusienne. Furthermore, the Examiner relies on both Figures 7b (four angles) and 5a of Meusienne to teach Applicant's claimed invention. One of ordinary skill in the art could not have combined Meusienne and Overbo, as Overbo would destroy the Meusienne reference.

In addition, there is no disclosure in either Bright or Dunne showing a plurality of angle members wherein each angle member has the first flat side oriented at an obtuse angle from the second flat side, as recited in independent claim 57. Claim 57 is therefore not obvious in light of Meusienne in view of Overbo, Bright and Dunne.

Applicant has made a sincere attempt to place this application in condition for allowance by conducting a personal interview with the Examiner on January 4, 2007, and amending the claims according to the Examiner's suggestions. Applicant has again amended the claims, specifically claims 27, 48 and 49, in order to advance prosecution.

The USPTO emphasizes the principles of compact prosecution. This is clearly not the case with the prosecution of this application. Applicant has received three non-final rejections to date, the latest non-final rejection being 26 pages in length. This is an onerous burden to any Applicant, let alone a small entity. And why, for example are claims 37-39 rejected in a different rejection than claim 42 when the same three references, i.e. Meusienne, Overbo and Robinson, are used and claims 37-39 and 42 all are dependent on the same independent claim, independent claim 1? The number of references used to reject the instant claims, as well as the number of reference combinations, is clearly strong evidence of nonobviousness.

#### **Regarding Doctrine of Equivalents**

Applicant hereby declares that any amendments herein that are not specifically made for the purpose of patentability are made for other purposes, such as clarification, and that no such changes shall be construed as limiting the scope of the claims or the application of the Doctrine of Equivalents.

Appl. No.: 10/765,028  
Amdt. Dated: August 2, 2007  
Reply of Office action of May 30, 2007

Docket No. KINZ-11521

**CONCLUSION**

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

If any fees, including extension of time fees or additional claims fees, are due as a result of this response, please charge Deposit Account No. 19-0513. This authorization is intended to act as a constructive petition for an extension of time, should an extension of time be needed as a result of this response. The Examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

Respectfully submitted,

Date: August 2, 2007

By: /Lori F. Cuomo/

Lori F. Cuomo  
Reg. No. 34,527

**SCHMEISER, OLSEN & WATTS LLP**  
18 East University Drive, #101  
Mesa, AZ 85201  
(480) 655-0073  
Customer No.: 23123